Engineering Lock.

INDEX

	Page
Aachen Hot Blast Cupola	289
A.C. Electricity Service Meters for 300 per cent Overload	267
Aerodynamic Turbine in Steel Plants	352
Aerodynamic Turbine versus Steam and Gas Turbines	34, 77
Analysing the Jet Propulsion Engine	249
Applications of the Heat Pump as a Heating Machine	167
Automatic Lathe without Cams	298
Automatic Mixer for Producer Gas Engines	120
Automatic Transfer Machines for Drilling Cylinder Blocks in Mass Production	273
Behaviour of Rivets during Riveting	199
Big-End Boring Machine	262
Bi-Metallic Pyrometer	104
Blow-Hole Formation in Oxy-Acetylene Welding of Aluminium Alloy Al-Mg 7	71
Bridge of a 25-ton Overhead Crane of Nailed Planks for a 5,000-ton Press	218
Calculation of a Fuselage Nose as a Space-Framework with Rigid Nodes	125
Cast Iron as Constructional Material	61
Centreless Grinding in Mass Production	184
Characteristics of Black Coatings for Non-ferrous Metals	57
Clamping Devices for Jigs and Fixtures	246
Computation of Roll Pressure in Cold Straightening of Tubes and Rods	329
Computation of Steam Boilers by a Graphical Method	22
Connecting Rod Acceleration	363
Considerations Influencing the Design of Wind Tunnels	191
Converting Two-Stroke Engine for Producer Gas Operation	205
Co-ordination of Insulation in High-Tension Plants	238
Coreless Induction Furnace Practice	338
Cylinder Wear Measurements on German and American Engines	179
Cylindrical Thread Grinding Machine	17
Determination of Discontinuities in Sheet Metal by means of Ultrasonics	200
Development of Cast Crankshafts	58
Diagrams for Quick Determination of Angles Required for Laying-out Sheet Metal Work	377
Distillation of Mixtures of Coal Mud and Coal	64
Double Circuit Fluid Brakes	257
Double Cutter-Bewel-Gear-Shaper	19
Double Exposure Radiography	58
Dressing Grinding Wheels without Diamonds	14
Dynamic Similitude of Turbo-Machinery for Compressible Fluids	271
Effectiveness of the Airscrew as a Landing Brake	115
Elastic Properties of Soft Rubber as Basis for Design Application	189
Electrical Energy Consumption in Electrolytical Processes	99
Electric Equipment of Producer Gas Vehicles	148
Electric Purity Control of Boiler Feed Water	25
Electric Steam Raising for Locomotives	6
Electronic Tubes : How they Work	153
End-Coil Design affects Tension Springs	253
Ericsson Automatic Telephone System	48
Establishing Lists of Types in the Manufacture of Three-Phase-Motors	373
Experimental Determination of the Stress Concentration Factor due to an abrupt change in the Diameter of a Shaft in Torsion	98
Extinction of the Arc in Single and Multiple Break Air-Blast High Speed Circuit Breakers	108
Fatigue Strength of Crankshafts of Large Diesels	285
Fatigue Testing of Metals	211
Filter Cloths in Synthetic Material	176
Flame Cutting of Steel	141
Formulae of the Theory of Aerofoils	20
Formula for Dimensions of Rotor Slots	198
French Gas Producer Industry in 1943	53
Fretting Corrosion : a Chemical-Mechanical Phenomenon	324
Fuel Contents Gauge for Aircraft	223
Fundamental Equation of Mechanics of Flight	93
German Machine Tools	17
Graphite Rod Resistance Type Melting Furnace	85
Grinding of Tools	15
Hardness Testing of Heat Treated Steels	313
Heat Conductivity of Mixed Gases	9
Heat Pump as Refrigerating and Heating Machine	133
Heat Treatment of Gray Cast Iron	3
High-Pressure Locomotive Type 232-P, with individual Axle Drive of the S.N.C.F.	242
Hot Alluminising of Steel	345
How to Choose and Use Carbide Tipped Tools	309
How to Improve Accuracy and Efficiency in Measurement and Testing of Gears	275
Ideal Cycles	333
Importance of Proper Choice of Heat Exchanger Surface particularly in Power Plant Equipment	83
Important Unknowns in Industrial Lubrication	174
Improved Star-Delta Starting Process for Squirrel Cage Motors	345
Induction Furnaces for Melting Metals and Alloys	235
Influence of Airscrew Thrust on Take-off Distance	299
Influence of Diameter upon the Properties of Steel Cable	111
Influence of Preliminary Deformation on the Decomposition of Austenites on Cooling	136
Inspection of Sparking Plugs as a means of Checking Engine Operation	105
Interferometer for Surface-Quality Measurement	247
Integrating Machine for Solving Ordinary Differential Equations	94
Internal Shoe Brakes	230
Internal Stresses of I-Beams	214
Iron Silicon Alloy of High Initial Permeability	26

	Page
Lathe Cutting Tests on Aluminium and Aluminium Alloys	355
Laurette Oil Filter	49
Light Alloy Extruded Sections	196
Light-Weight Construction in Railway and Road Vehicles	143
Machine for Synchronised Combined Bending and Torsional Fatigue Tests	302
Magnetic Methods for Testing Iron	10
Materials and the Science of Materials	157
Measurement of Power on Aero Engines in Flight	1
Measurements on Plasma Diffusion in Mercury Arcs	237
Medium Frequency Induction Hardening	325
Microcryoscopic Determination of Molecular Weight	274
Modern Hardness Testing Machines	240, 291
Modern Isolating Switches for Indoor Use	118
Modern Milling-Cutter Production	204
New Contact Elements for Centralograph Installations	296
New Device Measures the Temperature of Machine Components Revolving at High Speed	322
New Electric Drive for Rolling Mills	371
New Equipment for Centralised Control in Networks	328
New Hydrodynamic Principle of Sound Measurement	70
New Method for Welding Cables	146
New Method of Determining the Heat Exchange through Radiation	269
Nitriding Steels for Large Tools for Plastic Moulding	139
Nose Wheel or Tail Wheel Undercarriage	225
Novel Bending Device for Light Metal Tubing	241
Oerlikon Electro-Dynamometer Balance	369
Oil-Blast Breaker for Medium Voltage	46
Operating Economy of Pneumatic and Steam Forging Hammers	31, 75
Oxygen-Pressure-Gasification of Solid Fuels	308
Permanent-Current Electro-Magnet	182
Phenomenon of Metal Fatigue	312
Piston Area as the Basis of Similarity Consideration	96
Pit Coal of High Ash and Moisture Content as Boiler Fuel	209
Planer Type Milling Machines built from Sub-Assemblies	206
Plastic Bearings	366
Plastic Plywoods in Aircraft Construction	131
Power Recovery from Testing Aircraft Engines	306
Present Status of the Gas Turbine and its Economic Prospects,	341, 349
Pressure Combustion according to the Velox Principle	150
Pressure Control of Steam Mains supplied from Extraction Turbines	130
Problems on Torsional Vibration in Internal Combustion Engines	42
Production of Gray Iron Castings in Metal Moulds	208
Protective Atmospheres in the Heat Treatment of Metals	344
Rate of Combustion of Powdered Fuel	202
Recent Development of the Escher Wyss Steam Turbine	78
Relationship between Salt Content and Conductivity of Boiler Water in Electric Boiler Operation	86
Remarks on Jet-Propulsion of Aircraft	221
Rolling Mills for Light Alloys	137
Roll Pressure Measurement by means of an Electric Strain Gauge	12
Rubber Saving Experimental Tyre	142
Safety Devices on Presses and Stamping Machines	212
Saving and Substitution of Critical Materials	113
Scaling of Locomotive Boilers	101
Seven-Spindle Horizontal Automatic for Machining Large Work-pieces	29
Sharpening Ragged and Knobbling Rolls, Novel Method for	13
Shock Absorbing Suspension and Shock Absorbers	303
Short-Time Rating of Electrical Machinery	11
Simple Electric Pressure Relay	186
"Soft Skin" on Highly Finished Surfaces	65
Solubility of Ferrous-Oxide in Pure Solid Iron	201
Soviet W2 Tank Diesel	39, 67
Starting of Large Engines. Important Progress: The Inertia Starter	69
Strength of Arc Welded Seams	51
Stresses, Deformations and Vibrations of a Conical Wing Shell	293
Stressing of Rotating Airscrew Blades	177
Sulphur Contents of Carburizing Compounds in Electric Carburizing Furnace Operation	5
Supersonic Wind Tunnels	263
Swiss Glider Construction	128
Taper Measuring Device	295
Technical Innovations in the Soviet Tank Industry	282
Television Large Screen Projection	317
Temperature Distribution in Lathe Cutting Tools	71
Testing of Motor and Generator Armatures by means of Cathode Ray Tubes	55
Testing of Plastic Bearings in Switzerland	336
Thread and Gear Hobber	18
Water Circulation in Bent-Tube and Radiant Boilers	109
Weight of Steel Lattice Poles for Long Distance Lines	
Welding Conditions and Mechanical Properties of Spot-Welded Aluminium Sheets	361
Welding Machines with Condenser Discharge	377
Wood used as Material for Chemical Apparatus	152
Yield Point and Stress Distribution in Bars and Tubes due to Plastic Bending	227

Page
208
344
202
78
86
221
137
12
142
212
113
101
29
13
303
11
186
65
201
39, 67
69
51
293
177
5
263
128
295
282
317
71
55
336
18
109
361
377
152
227